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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Richard Wyrwas

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2740

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04/23/2004

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EXAMINER

TRINH, TAN H

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 04/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/869,910

Applicant(s)

WYRWAS, RICHARD

Examiner

TAN TRINH

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 12-20 and 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Haugli (U.S. Patent No. 5,914,944).

Regarding claims 12 and 20, Haugli teaches a method of mitigating interference in a satellite user uplink signal of a satellite mobile communications system (see fig. 3) which comprises a plurality of non-geostationary orbiting satellites each radiating a beam pattern of multiple beams (see figs. 1 and 3, col. 7, line 3), comprising: providing overlapping coverage of a region of the Earth which is subject to interference at an interference frequency (see fig. 1, overlapping coverage of a region 2, and col. 1, lines 11-13) by a first beam of a first satellite and at least a second beam of a second satellite (see fig. 1 and col. 4, lines 29-32); determining which of the first or the second beam is more peripheral within their respective satellite beam patterns (see col. 4, lines 29-38) ; and controlling communications on the more peripheral the beam to limit reception thereby at the interference frequency (see col. 4, line 29 - col. 5, line 5).

Regarding claim 13, Haugli teaches maintaining data defining an interference region from which interference at the interference frequency may be transmitted (see col. 6, lines 9-35).

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Regarding claim 14, Haugli teaches the data defines an interference area of the Earth (see col. 1, lines 11-22).

Regarding claim 15, Haugli teaches the data defines a position on the Earth of an interference source (see col. 4, lines 38-42).

Regarding claim 16, Haugli teaches periodically assessing those beams, which overlap an interference area (see col. 3, lines 29-32).

Regarding claim 17, Haugli teaches the step of controlling communications comprises not using the more peripheral the beam for new calls (see col. 5, lines 45-47).

Regarding claim 18, Haugli teaches the step of controlling communications comprises handing off (see col. 2, line 65-col. 2, line 6) current calls on channels, which overlap the interference frequency (see col. 5, lines 50-58).

Regarding claim 19, Haugli teaches the step of controlling communications  
Comprise reallocating communications channels between the beams such that frequencies of communications channels used to communicate via the more peripheral beam do not overlap the interference frequency (see col. 2, lines 7-17 and col. 6, lines 43-47).

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Regarding claim 22, Haugli teaches arranged to communicate with a terrestrial station of network (see fig. 1, col. 5, lines 36-40).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haugli (U.S. Patent No. 5,914,944) in view of Wiedeman (U. S. Patent No. 5,884,142).

Regarding claim 21, Haugli teaches the first and second beams overlap the positions (see col. 2, line 58-col. 3, line 32) and where transmitters of the interference may be located (see col. 4, lines 29-42). But Haugli fails to teach for storing data defining positions on the Earth.

However, Wiedeman teaches for storing data defining positions on the Earth (see col. 4, lines 40-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Haugli system and by the providing of the teaching of Wiedeman on the store location on earth thereto in order to provide on-broad satellite to process the map data and the beams is move with respect to the regional service easier.

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***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wiedeman (U.S. Patent No. 6,272,316) discloses mobile satellite user information request system and methods.

Kapoor (U.S. Patent No. 6,404,769) discloses direction routing of packets in a satellite network.

Dent (U.S. Patent No. 5,841,766) discloses diversity-oriented channel allocation in a mobile communications system.

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314, (for Technology Center 2600 only)**

*Hand-delivered responses should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (703) 305-5622. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

Tan H. Trinh  
Art Unit 2684  
April 16, 2004



**NICK CORSARO**  
**PATENT EXAMINER**